

CLAIMS:

1. An audio interval training device, comprising:
a sensing unit to obtain a parameter of a user in physical exercise;
a memory to store a plurality of audio signals, each having a predetermined tempo value; and
a processing unit configured to (1) receive a first and second target parameter value, (2) select a first and second audio signals having a respective tempo, (3) alternatively rendering the first and second audio signals, wherein a respective audio signal is rendered to the user corresponding to the first and second target parameter value, as determined by the processing unit using the parameter from the sensing unit.
2. The audio interval training device as claimed in claim 1, wherein the parameter is a pulse rate.
3. The audio interval training device as claimed in claim 1, wherein the parameter is a time-interval.
4. The audio interval training device as claimed in claim 1, wherein the tempo is a beat per minute value.
5. The audio interval training device as claimed in claim 1, wherein the sensing unit is a heart rate monitor or a timer device.
6. The audio interval training device as claimed in claim 5, wherein a respective audio signal is rendered to the user until the user's heart rate reaches the first or second target heart rate, as determined by the processing unit using a received heart rate from the heart rate monitor.
7. The audio interval training device as claimed in claim 1, wherein the sensing unit and the processing unit are connected in a wired or wireless way.

8. The audio interval training device as claimed in claim 1, wherein the first and second target parameter value include target parameter value selected by a user or a programmed exercise routine.

9. The audio interval training device as claimed in claim 1, wherein the audio signals are annotated with their beat per minute value.

10. The audio interval training device as claimed in claim 1, wherein the tempo values of the plurality of audio signal are determined either by the audio interval training device, or by an external device and transferred to the audio interval training device.

11. The audio interval training device as claimed in claim 1, wherein the audio signals are encoded in an MP3, WAV, MPEG-4, WMA or AAC format.

12. An audio interval training method, comprising steps of:
receiving a first and second target parameter value;
receiving a parameter of a user in physical exercise from a sensing unit ;
selecting a first and second audio signal having respective tempos; and
alternatively rendering the first and second audio signal to a user, wherein a respective audio signal is rendered to the user corresponding to the first and second target parameter value, as determined by the processing unit using the parameter from the sensing unit.

13. The audio interval training method as claimed in claim 12, further comprising the step of, a user, selecting the first and second target parameter value from a group of predetermined target parameter value or a programmed exercise routine that includes the first and second target parameter value.

14. The audio interval training method as claimed in claim 12, wherein the audio signals are encoded in an MP3, WAV, MPEG-4 or WMA format.

15. The audio interval training method as claimed in claim 12, further comprising the step of, selecting a third and/or forth audio signal having respective tempos similar to the first and second audio signals.

16. The audio interval training method as claimed in claim 13, further comprising the step of, at a predetermined time, rendering the third and forth audio signals in place of the first and second audio signals respectively.

17. The audio interval training method as claimed in claim 12, wherein the parameter is a pulse rate or a time-interval.